CONTRACT NO. 62949

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

NOTES:

HANDHOLE COVER

DETAIL "A"

DETAIL "B"

RECESSED COVER

DIRECT BURIAL

GROUND CABLES

TO CONTROLLER
DOUBLE HANDHOLE

TO POLE OR

POST AS REQ'D.

SEE DETAIL "B"

HANDHOLE COVER HANDLE

CAST CORNER FRAME WEB

ANTI-CORROSION COMPOUND
SHALL BE APPLIED ON ALL
BOLT/ CONNECTION ASSEMBLIES.

-STAINLESS STEEL NUT AND 2 STAINLESS

SEE DETAIL "A"

CABLE HOOKS

REQUIRED. ALL

COMPRESSION CONNECTOR

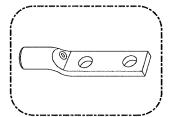
UL LISTED GROUND

UL LISTED GROUND COMPRESSION CONNECTOR WITH STAINLESS STEEL NUT

HANDHOLE FRAME

GROUNDING SYSTEM

- 1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC,). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS. THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT
- 2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- 3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

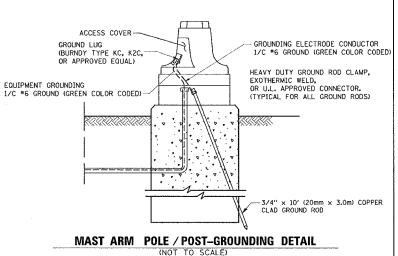


HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EUAL)

• ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
• GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.
5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE

STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE

TS05

MOUNTING PLATE 00 TOP & BOTTOM AS PER-MANUFACTURER -STANDOFF 1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508. (H) CABINET. SHEET ALUMINUM -PANELBOARD INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL. FABRICATION -PRESSURE 2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED. CONNECTOR, TYP. -60A, MAIN CONTINUOUS PIANO HINGE-DISCONNEC --15A. MAIN DISCONNECT -FUSE, KLKR 1/4 A TRAFFIC SIGNAL CONTROLLER CABINET POLE MOUNTED SERVICE -PADLOCK, FURNISHED BY CABINET OUTSIDE
DIMENSIONS L 6" x W 12" x H 14" CONTRACTOR, KEYED TO DISTRICT 1 REQUIREMENTS BREAKER L (150mm) x W (300mm) x H (355mm) NEUTRAL • POWER INDICATOR LIGHT INTERNALLY MOUNTED FOR ----COMPRESSION LATCH, TYP. (2 MIN. REQ'D) GROUND MOUNTED SERVICE -1 1/4" (30mm) DIA. COUPLING -STRAIN RELIEF COUPLING TO GROUND ROD--SECONDARY ELECTRICAL SERVICE BY UTILITY CO. 3/4" (20mm) GALV. CONDUIT -2/C (NEUTRAL-WHITE, PHASE-BLACK) ELECTRICAL SERVICE TO TRAFFIC SIGNAL CONTROLLER

(SEE ALL CABLE PLAN, FOR ALL CABLE SIZES)

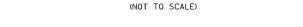
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)

-1/C GROUND (GREEN COLOR CODED)

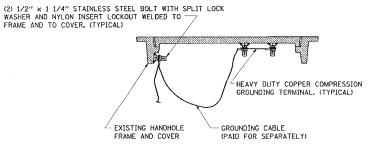
13.75" (0.35 m) - DOOR OPENING ~/--I.D.O.T. IDENTIFICATION DECALS SHALL BE MOUNTED TO FRONT OF DOORS OF ALL TYPES ELECTRIC 10' (3.0m) MAX. UTILITY ENCLOSURE -ELECTRICAL SERVICE LOCK (ABOVE OR BELOW SEE PANEL DIAGRAM, ABOVE GROUND) -CONDUIT BUSHINGS SEE CABINET BASE, BELOW SEE ELECTRICAL FINISH GRADE-SERVICE -24" (0.60m), ~ 4' (1.2m) DEPTH PANEL DIAGRAM SQUARE FOUNDATION 3" MAX TO TRAFFIC SIGNAL CONTROLLER 2" (50mm) GALV. CONDUIT SERVICE INSTALLATION $-3/4'' \times 10'$ (20mm \times 3.0m) COPPER CLAD GROUND ROD **GROUND MOUNT** (413 mm) 16.25" (0.29 m) 11.50" CABINET BASE BOLT LOCATIONS

CABINET - BASE BOLT PATTERN



HANDHOLE COVER & FRAME - GROUNDING DETAIL

1-1/C #6 (GREEN)



EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)